MOHAMMAD ALI SALMANI NODOUSHAN*

A STRUCTURAL MOVE ANALYSIS OF DISCUSSION SUB-GENRE IN APPLIED LINGUISTICS

1. INTRODUCTION

The question of how to teach writing in a second/foreign language has been at the center of attention for a good number of researchers and educators over the past several decades.

Attempts at determining how to teach writing, and what to teach in writing courses, have resulted in a wealth of teaching methods, materials, and procedures, and the quest is still going on. More and more people are learning foreign/second languages, and their needs are getting ever-more varied. As such, different fields of Applied Linguistics have turned their eyes to the nature of writing and to what comprises a good piece of written text. However, a close look at the literature on teaching writing reveals that most students, even those with high scores in English, often have difficulties in expressing themselves in writing. They have not only difficulties in choosing proper vocabulary and corret grammar rules but also in organizing the structure depending on topic.

Genre analysts have reasons to argue that a genre-analytic approach to the understanding of text structure, and to the teaching of writing, will result in L2/FL written success. This approach will help readers to understand and to achieve text objectives comprehensively. By the same token, the current researcher believes that, through genre-analytic approaches to L2/FL language teaching, students will become able to differentiate between different types of text, and that they will obtain useful information about the nature of different types of texts which eventually help them write better even when they engage in writing such academically complex genres as masters theses or PhD dissertations.

The problem, however, is that there is a dearth of research that describes the nature of written text from a genre-analytic perspective. This shortage is even more dramatic in Iran. There are only a few studies that have evaluated masters theses

* **Mohammad Ali Salmani Nodoushan**: PhD in Applied Linguistics, editor in chief of the International Journal of Language Studies (IJLS), Web: http://www.ijls.net/. **The author acknowledges the cooperation of Mrs Nafiseh Khakbaz.**

DACOROMANIA, serie nouă, XVII, 2012, nr. 2, p. 199–212

from a genre-analytic perspective. None, however, has focused on the move structure of the discussion sections of applied linguistics masters theses. The current study sought to identify the default move structure of masters thesis discussions and to provide pedagogical implications for EFL/ESL writing classes. This study also aimed at finding and describing the obligatory, conventional, and optional moves in the 'discussion' subgenre of a set of masters theses written by Iranian EFL learners. The study compared the move structure of masters thesis discussions written by Iranian EFL graduates with those of their non-Iranian counterparts, on the one hand, and those found in reasearch articles, on the other.

2. BACKGROUND

There are many studies that report on the different aspects of 'composing' processes and sub-processes. Over the past few decades studies focused on such processes as 'revising' (Sze 2002), 'formulating' (Zimmerman 2000), 'pausing' (Miller 2000), 'reviewing and annotation of text' (Cresswell 2000), 'summarizing' (Yang, Shi 2003), and so on. The literature on writing also reports on variables that affect writing such as L2 proficiency, transfer from L1, writing fluency, writing strategies, and textual complexity (Aidman 2002; Sasaki 2000; Woodall 2002).

More recently, some researchers reported on studies that implement the findings of genre-/move-based text analysis investigations in the teaching of writing. There are, however, not many such studies of this nature. K. Schindler (2000) is perhaps the first to emphasize the importance of „text pattern knowledge" in relation to writing. Along the same lines, T. Silva, B. Brice (2004) noticed that while „work on text is still dominant in the literature, within textual studies there is a trend toward greater variety with regard to foci, context, genre, and level" (p. 72).

One area of writing which can benefit from genre-/move-based studies is writing the 'discussion' sub-genre. Students, for instance, often report that they have difficulty in writing the discussion section of their theses. This has been noticed by several scholars in the field of second/foreign language writing. (Swales, Feak 1994; Swales, Feak 2003; Wilkinson 1991). J. M. Swales, C. B. Feak, for example, argued that „The problem is that Discussions vary considerably depending on a number of factors" (1994, p. 195). They noticed that one factor that determines this variability is the difference in the type of research questions that different studies set out to investigate; while some research questions require description of a particular phenomenon, others may be oriented towards finding solutions to a problem (Swales, Feak 1994).

As such, „different types of questions require research writers to focus on different parts of the research such as the results section or the research methods section or the related literature in order to support their answers" (Rasmeenin 2006, p. 1). Another reason for this discrepancy may be due to the exact place in the research report which is dedicated to the 'discussion' sub-genre. J. M. Swales,

C. B. Feak (1994) argued that where the discussion section is placed in the text tacitly implies that the audience have read and understood all the preceding sections. According to C. Rasmeenin (2006), while some writers begin the discussion subgenre by answering the research questions, others prefer to start by summarizing results or even highlighting the main findings. This indicates that there is no unanimously agreed-upon pattern for the writing of discussions. Therefore, it is not surprising that „this section is less uniformly structured than the others" (Sereebenjapol 2003, p. 3).

In an attempt to present a unified framework for discussion writers based on which they can tailor their discussions to the communicative purpose they are normally expected to serve, R. Yang, D. Allison (2003) proposed a move-structure framework. This move framework was developed based on their previous studies that examined published research articles in applied linguistics. This framework identifies seven rhetorical moves that writers use in their discussions.

- Move 1: Background Information: Authors often use this move to restate the aims, objectives, procedural information, theories, and research questions (Weissberg, Buker 1990). For this purpose, authors often use metadiscursive elements (or metatext) to signal their move to the reader (e.g., the aim of this study was to...).
- Move 2: Reporting Results: Move 2 is used by authors to present the results of their studies. The main textual features than often signals this move are 'reporting verbs' and 'past tense'. The move is often made through the presentation of examples, numerical values, graphs, tables, or observations as well as comments on the expectedness and unexpectedness of outcomes (Rasmeenin 2006). This is commonly known as data commentary.
- Move 3: Summarizing Results: this move differs from move 2 in that here only a summary of the results is presented where as in move 2 particular results and factors are discussed.
- Move 4: Commenting on Results: Author make this move for such purposes as providing subjective judgments about their studies' results, interpreting their findings, and comparing their studies with the literature (Rasmeenin 2006). The move very often draws on one or a combination of these four steps: (1) Step A: Interpreting results, (2) Step B: Comparing/ Contrasting results with literature, (3) Step C: Accounting for results, and (4) Step D: Evaluating results (for examples of each step, please see Yang, Allison 2003).
- Move 5: Summarizing the Study: Here authors provide a summary of the whole study – not just a summary of the results as in move 3. To this end, they often use such lexicogrammatical signals as the present perfect tense together with such words as 'study' and 'research' (Rasmeenin 2006). This move is very often found at the end of discussions.
- Move 6: Evaluating the Study: Move six is often made by authors to judge their studies in term of its significance, limitations, delimitations, generalizability, novelty, strengths, and weaknesses. Like move 4, this move, too, often draws on one or a combination of steps: (1) Step A: Indicating limitations, (2) Step B: Indicating significance/advantage, and/or (3) Step C: Evaluating methodology (Rasmeenin

2006). To this end, authors often use 'positive' verbs to signal what their studies 'expand on' or 'add to' the literature, 'gain' new things, 'contribute' to the existing body of knowledge, 'are confined to' certain bounds, are 'only a means' to an end, 'do not claim being exhaustive', etc. (*ibidem*).

- Move 7: Deductions from Research: In this move authors often make suggestions concerning areas for further research or solutions to certain problems. They may as well provide implications for teaching. The move is quite often made in one or a combination of steps: (1) Step A: Making suggestions, (2) Step B: Recommending further research, and/or (3) Step C: Drawing pedagogic implications.

The R. Yang, D. Allison (2003) framework, though not the only available framework, is the most comprehensive one. There are several other frameworks for move analysis (e.g.: Hopkins, Dudley-Evans 1988; Kanoksilapatham 2005; Peng 1987). The R. Yang, D. Allison's move model is, however, preferred for several reasons. First, other frameworks do not belong to Applied Linguistics; since disciplinary variations in terms of communicative purposes and language use do exist, the R. Yang, D. Allison's move model is the most suitable framework for applied linguistics research (Holmes, 1997; Kanoksilapatham 2005; Nwogu 1997). Moreover, this model is an extension and modification of several other models, and its developers have found it to be the most comprehensive model for move analysis in Applied Linguistics (compare Holmes, 1997; Hopkins, Dudley-Evans 1988; Peng 1987; Yang, Allison 2003).

3. METHOD

3.1. CORPUS PROCEDURES

This study is based on 46 ($N = 46$) 'discussion' sections taken from MA theses written in English by Iranian EFL students. To access a pool of 'discussion' sub-genres, emails were sent to theses supervisors/advisors/writers (selected through a snowball sampling procedure (Gall *et alii* 1996)) and they were asked to provide the *.DOC files that contained the 'discussion' subgenres of the theses they had supervised/advised/written. Care was taken to obtain many more 'discussions' than were needed in the corpus. This procedure returned 107 discussions of which 93 were judged as free from grammatical and textual errors by both a post-graduate ESP professor and the author. It was important that the discussions be free from grammatical and textual errors since each text was to be submitted to the *AntMover* software for analysis. The assumption was that the texts – i.e., the discussions used as data – were error-free so that the software would not run into difficulty analyzing them. The 93 error-free discussions comprised the pool of data for this study. To determine how many of these discussions to be included in the study, the W. G. Cochran (1977) approach to determining sample size was used, and on this basis it was decided that 46 discussions from the pool of

93 discussions be included in the study. The 46 discussions were selected through a simple random sampling procedure from among the 93 discussions present in the pool of data.

3.2. INSTRUMENTATION

The study made use of two types of instrumentations: The *AntMover* software (developed by Laurence Anthony 2003) and the R. Yang, D. Allison (2003) 'discussion' move structure framework. The *AntMover* is an automatic text structure analyzer. Once a text file is opened in *AntMover*, it is imported into the program for analysis. The user can then choose up to four views of the file. Each discussion from the corpus was input to the *AntMover* to identify its move structure. The second instrument used in the study was the framework for the analysis of the move structure of 'discussion' sub-genre (Yang, Allison 2003). This framework is designed for human coders. Human coders can use the steps and the moves depicted in this framework for the analysis of moves and steps in a 'discussion' corpus; it is important that frequencies and percentages for each move be found, and the results be used as the data. Human coders can also use such linguistic features as words, structures, hedging devices, and citations for the identification of moves and steps. They can also closely read each text and use such organizational clues as headings and subheadings for identifying moves and steps.

3.3. DATA PROCEDURES

After the required corpus was obtained, each text/discussion was assigned a unique code (e.g., D#1, D#2, D#3 ... D#46). In the next step, a set of analyses were performed. A frequency count was performed to identify the total number of words in each discussion. Then each discussion was saved as a *.txt file to be submitted for move analysis to the *AntMover*.

A structural move analysis was also performed by two human coders who separately coded each discussion and identified the moves. Then the coders met and discussed their codings and compared them with the output from *AntMover*. Where there was a mismatch or difference in coding, it was resolved through extensive discussion, and where need, a third coder was asked to code the problematic 'discussion'. 12 out of the 46 discussions required the attention of an outside coder. It had been decided from the start of the study that wide disagreements and odd codings should definitely result in the faulty discussion's being discarded from the corpus – which fortunately did not happen.

The frequency of each move in each discussion was recorded; this was done to verify the extent to which any given move had been used. It was decided that, like in a similar study done by C. Rasmeenin (2006), moves be classified as obligatory (if the move was observed in 100% of the discussions), conventional (if

observed in 66% to 99% of the discussions), or optional (if in less than 66% of the discussions).

The recurring patterns or the uses of move cycles were totaled, averaged, and tabulated. This resulted in the identification of general move sequences and patterns. Then, the frequencies and percentages that ensued were used as the data that were then analyzed. The results of the move analysis of the sampled discussions were compared to those of the study done by C. Rasmeenin (2006). The frequencies reported by C. Rasmeenin (2006) were used as the expected frequencies and the frequencies found in the data set for the current study as observed frequencies. They were submitted to a chi-square analysis to test the null hypothesis that „there is no significant difference in the move structure of the discussion sub-genre of MA theses written by Iranian EFL students and that of non-Iranians". The results of the move analysis of the sampled discussions were also compared to R. Yang, D. Allison's seven-move model (2003) to determine to what extent the moves observed in the discussions from applied linguistics theses written by Iranian EFL graduates were similar to and/or different from the moves found by R. Yang, D. Allison (2003) for scholarly journal papers. The frequencies reported by R. Yang, D. Allison (2003) were used as the expected frequencies and the frequencies found in the data set for the current study as observed frequencies. They were submitted to a chi-square analysis to test the null hypothesis that „there is no significant difference in the move structure of the discussion sub-genre of MA theses written by Iranian EFL students and that of the discussion sub-genre of journal papers published in internationally recognized applied-linguistic journals".

3.4. VALIDITY AND RELIABILITY

To estimate the convergent validity of the data, the frequencies identified by the human coders were totaled and averaged and then correlated with the frequencies obtained through *AntMover*. This was done through the use of a one-tailed bivariate correlation analysis using Spearman's rho. The resulting value (*rho* = .894) indicated a very good index of validity. As to the reliability of the data, the Intercoder Agreement was evaluated. The frequencies identified by the human coders were correlated through another one-tailed bivariate correlation analysis using Spearman's rho. The reliability index was high enough to make the study reliable (*rho* = .931).

4. DATA ANALYSIS

The word count for the 46 discussions revealed that a total of 157,259 words had been used by the writers in writing the 46 discussions. The average word count for the discussions was 3418.67 words per discussion. The range was 6318 with the shortest discussion consisting of 1054 words and the longest 7372 words. A total of 1233 moves were identified in the corpus.

Move 2 (i.e., reporting results) was the most frequent move (f = 343); it accounted for 27.82% of the moves observed in the corpus. Move 4 (i.e., commenting on results) with a frequency of 224 (f = 224) and move 7 (i.e., deducing from the results with a frequency of 223 (f = 223) were the second and third most frequent moves. Move 1 (i.e., providing background information; f = 196) and move 3 (summarizing results; f = 137) were next. The least frequent moves were move 5 (i.e., summarizing the study; f = 57) and move 6 (i.e., evaluating the study; f = 53).

Inferential statistical analyses were also conducted to test the null hypotheses of the study and to provide data-based answers to the research questions of the study. The study attempted to answer the following questions:

1) Is there any significant difference in the move frequency of the discussion sub-genre of MA theses written by Iranian EFL students and their non-Iranian counterparts.
2) Is there any significant difference in the move frequency of the discussion sub-genre of MA theses written by Iranian EFL students and that of the discussion sub-genre of scholarly journal papers in applied linguistics.
3) What are the obligatory (or key), optional, and conventional moves in the discussion sub-genre of Iranian EFL students' MA theses in Applied Linguistics?

To answer the first question, the observed move frequencies in the current study were compared to those of C. Rasmeenin (2006). A Mann-Whitney U test was performed on the data. The results of this analysis are displayed in Table 1.

Table 1

Mann-Whitney U Test Results for the Seven Moves in Rasmeenin 2006 vs. This Study

	Move 1	Move 2	Move 3	Move 4	Move 5	Move 6
Mann-Whitnev U	64.000	25.500	34.000	26.500	106.000	124.500
Wilcoxon W	1145.000	1106.500	1115.000	1107.500	151.000	169.500
Z	–3.286	–4.143	–3.992	–4.165	–2.560	–1.987
Asymp. Sig. (2-tailed)	.001	.000	.000	.000	.010	.047
r	.443	.559	.538	.562	.345	.268

Moreover, a median analysis was conducted to determine the effect sizes. Table 2 displays the results for this analysis.

Table 2

Median Analysis for the Seven Moves in Rasmeenin 2006 vs. This Study

	Move 1	Move 2	Move 3	Move 4	Move 5	Move 6	Move 7
Current Studv	4.0000	6.5000	2.0000	4.0000	1.0000	1.0000	4.0000
Rasmeenin 2006	7.0000	29.0000	8.0000	17.0000	.0000	.0000	9.0000
Total	4.0000	7.0000	2.0000	4.0000	1.0000	1.0000	5.0000

The analyses revealed that there was a statistically significant difference between the Iranian and non-Iranian MA graduates in terms of the frequency of moves in the discussion subgenre of their MA theses. As for move 1 (i.e.,

Providing background information), the Mann-Whitney U test indicated the existence of a significant difference between the Iranian MA graduates (Md = 4.00, n = 46) and their non-Iranian counterparts (Md = 7.00, n = 9), U = 64.00, z = –3.286, r = .443. The r value is calculated by dividing the observed z by the square root of N and is used for determining the effect size. According to Cohen (1988), the r value equal to .1 indicates small effect, .3 shows medium effect, and .5 shows large effect. Therefore, the size of the observed difference between the two groups in terms of move 1 was large.

The Mann-Whitney U test results also indicated a meaningful difference in terms of move 2 (i.e., Reporting results) between the Iranian group (Md = 6.50, n = 46) and the non- Iranian counterpart (Md = 29.00, n = 9), U = 25.50, z = –4.143, r = .559. Again the size of the difference was large. The third move (i.e., Summarizing results) was also different for the sample from the Iranian group (Md = 2.00, n = 46) and its non-Iranian counterpart (Md = 8.00, n = 9), U = 34.00, z = –3.992, r = .538. Move 4 (i.e., Commenting on results), too, revealed a similar difference [Iranian: Md = 4.00, n = 46); non-Iranian: Md = 17.00, n = 9), U = 26.50, z = –4.165, r = .562]. The same was true for move 5 (i.e., Summarizing the study) [Iranian: Md = 1.00, n = 46); non-Iranian: Md = 0.00, n = 9), U = 106.00, z = –2.560, r = .345]. Move 6 (i.e., Evaluating the study) was not that different either [Iranian: Md = 1, n = 46); non-Iranian: Md = 0.00, n = 9), U = 124.50, z = –1.987, r = .268]. Finally, move 7 (i.e., Deductions from the research) also revealed a somewhat similar pattern [Iranian: Md = 4.00, n = 46); non-Iranian: Md = 9.00, n = 9), U = 85.5, z = –2.788, r = .376]. These findings indicated that there is a significant difference in the move frequency of the discussion sub-genre of MA theses written by Iranian EFL students and that of non-Iranians.

A one sample t tests was also performed for each move. The observed move frequencies were converted into percentages to make the scale of the data interval. The resulting percentages were then compared to the percentages reported by R. Yang, D. Allison (2003) in the literature. The results reported by R. Yang, D. Allison (2003) were used as the test values for the present study because this study took their framework as the standard framework for writing discussion subgenres. Table 3 displays the descriptive statistics for the seven moves. Table 4 presents the results of the set of One-Sample t-Tests for the Seven Moves.

Table 3

One-Sample Descriptive Statistics for the Seven Moves

		N	Mean	SD	Std. Error Mean
Move 1	Background Information	46	4.26	3.12	0.46
Move 2	Reporting Results	46	7.46	4.73	0.7
Move 3	Summarizing Results	46	2.98	2.83	0.42
Move 4	Commenting on Results	46	4.87	2.85	0.42
Move 5	Summarizing the Study	46	1.24	1.16	0.17
Move 6	Evaluating the Study	46	1.15	1.17	0.17
Move 7	Deductions from the Research	46	4.85	2.84	0.42

Table 4

One-Sample t-Test for the Seven Moves

		t	df	Sig. (2-tailed)	Mean Diff.	
Move 1	Background Information	2.962	45	.005	1.36087	0.14
Move 2	Reporting Results	–17.424	45	.000	–12.14348	0.54
Move 3	Summarizing Results	–9.391	45	.000	–3.92174	0.49
Move 4	Commenting on Results	–79.351	45	.000	–33.33043	4.10
Move 5	Summarizing the Study	–9.725	45	.000	–1.66087	1.24
Move 6	Evaluating the Study	–33.229	45	.000	–5.74783	4.17
Move 7	Deductions from the Research	–42.454	45	.000	–17.75217	2.21

As table 4 indicates, there was a significant difference between the moves employed by Iranian MA graduates in writing their discussion subgenres and the standard moves that are normally expected in this subgenre. The γ values reported in Table 4. show the size of the observed difference. According to D. C. Howell (1995), a γ = .2 shows a small effect, a γ = .5 shows a medium effect, and a γ = .8 shows large effect. The γ values were calculated through the following equation: $\gamma = \mu_1 - \mu_0/\sigma$.

There was a meaningful difference between this study and the standard framework proposed by R. Yang, D. Allison (2003) in terms of the first move (i.e., Providing background Information). The Iranian MA graduates did not follow the standards of practice in using move 1 in writing their discussion subgenres [*M* = 4.26, *SD* = 3.12; *t* = 2.962, *p* = .005, γ = .14]. The size of the effect for move 1 was very small. The same was true for move 2 (i.e., Reporting Results). The Iranian population was not observant of the standard practice [*M* = 7.46, *SD* = 4.73; *t* = –17 424, *p* = .000, γ = .54]. The size of the effect in this case was medium. As for move 3 (i.e., Summarizing Results), like move 2, the size of the effect was almost medium [*M* = 2.98, *SD* = 2.83; *t* = –9.391, *p* = .000, γ = .49]. The observed difference for move 4 (i.e., Commenting on Results) was really shocking. There was a huge difference between the Iranian sample and the R. Yang, D. Allison (2003) framework [*M* = 4.87, *SD* = 2.85; *t* = – 79.351, *p* = .000, γ = 4.10]. Move 5 (i.e., Summarizing the Study) was no exception. The size of the effect for this move was also large [*M* = 1.24, *SD* = 1.16; *t* = –9.725, *p* = .000, γ = 1.24]. Move 6 (i.e., Evaluating the Study) was very much like move 4. The size of the observed difference was very large [*M* = 1.15, *SD* = 1.17; *t* = –33.229, *p* = .000, γ = 4.17]. Finally, move 7 (i.e., Deductions from the Research) also showed a large effect size [*M* = 4.85, *SD* = 2.84; *t* = –42.454, *p* = .000, γ = 2.21].

The study also aimed at finding which moves were considered obligatory, which conventional, and which optional by Iranian MA graduates. This required a qualitative evaluation of the data and the corpus (based on the percentages presented in section 3.3 above). Table 5 displays the percentages of move occurrence in C. Rasmeenin (2006) and the current study.

Table 5

Percentages of Move Occurrence

What happens in the move		% of move occurrence	
		Rasmeenin 2006	Current Study
Move 1	Background Information	100%	93.48%
Move 2	Reporting Result	100%	100%
Move 3	Summarizing Result	100%	93.48%
Move 4	Commenting on Result	100%	100%
Move 5	Summarizing the Study	44%	82.61%
Move 6	Evaluating the study	33%	60.87%
Move 7	Deductions from Research	100%	100%

As it can be seen from Table 5, there were no conventional moves in C. Rasmeenin's (2006) study; moves 5 and 6 were optional and the remaining moves were all obligatory. In the present study, however, all the three move types were seen. Moves 2, 4, and 7 were considered obligatory. Moves 1, 3, and 5 were considered as conventional moves by Iranian MA graduates. Finally, only move 6 was considered by Iranian MA graduates to be the optional move. This answers the third research question above.

5. DISCUSSION

A meaningful difference was found between the move composition of discussion subgenres written by Iranian MA graduates and those of their non-Iranian counterparts as reported by C. Rasmeenin (2006). The difference observed may in part be due to the difference in sample size; while the current study used 46 discussions in its corpus, the study by C. Rasmeenin was based only on nine discussions.

A meaningful difference was also found between the move composition of discussion subgenres written by Iranian MA graduates and those of journal paper authors (as reported by Yang, Allison 2003). Since the R. Yang, D. Allison framework for move analysis is often taken as the parameter for the evaluation of the move structure of discussion subgenres, the discrepancy between the corpus of the current study and that of R. Yang, D. Allison (2003) is somewhat unfavorable. It can only be justified if we take journal-paper discussions and MA thesis discussions to be totally different and unrelated pieces of writing, which often is not the case; many research papers published in journals are reports based on MA theses, after all. It is, therefore, normally expected that the two pieces of writing be positively correlated.

It seems that this difference shows that enough attention is not given to 'moves' and 'move structure' in EFL writing classes. Iranian MA graduates find it

difficult to make deductions from their data (i.e., move 7), to evaluate their studies (i.e., move 6), and to comment on the results of their studies (i.e., move 4). EFL writing courses at MA level should therefore make MA students move-sensitive when they start to produce academic genres and subgenres. It should also be noted that Iranian MA graduates do not like to evaluate their own studies (i.e., move 6) and take this move to be optional. This may have to do with a cultural schema – which implies that a work should be evaluated by an outsider. Teachers of academic writing should tell MA students that self-evaluation is a common practice in EFL writing.

In writing each subgenre, the writer is expected to ask himself/herself a question: What is the communicative purpose of this subgenre? For instance, R. Yang, D. Allison (2003) argued that the major communicative purpose of the 'results' subgenre is to 'report the results' whereas that of the 'discussion' subgenre is to 'comment on results'. However, the percentage of 'commenting on results' in the thesis corpus of this study was far less than that of R. Yang, D. Allison's study. The reason for this dissimilarity may be that Iranian MA graduates prefer objective 'reports of results' to subjective 'commentaries and evaluations'. This behavior may tacitly suggests that the results of a study can stand on their own, no matter whether there is any commentary following them. This claim, however, needs further research.

Another explanation for this observation may lie in the preferences of the individual universities (from which the corpus was sampled) or the theses supervisors. Perhaps, universities and supervisors have different preferences. This claim, too, needs further research. It is possible to develop qualitative research designs which seek to interview university authorities and thesis supervisors to see if their preferences affect the overall structure of thesis subgenres.

Another point implied by the results of this study is that Iranian theses rely heavily on 'providing background information' (i.e., move 1). The reason for this is not clear. One possible explanation is perhaps thesis writers' worries about the validity of their research findings. Too much reliance on background information seems to mix the function of 'literature review' with that of 'discussion'. So much reliance on 'providing background information' is not that acceptable when one takes the thesis readership into account; for example, P. Thompson (2001, p. 80) stated that theses should be written „on a level of parity (neither speaking up nor down to the reader)" (i.e., to researchers in the same field). This means that the thesis readership is not 'naïve' and does not need to see a lot of 'background information' in the 'discussion' subgenre. The validity of these claims, however, requires further research.

While three moves (i.e., move 2: Reporting Results, move 4: Commenting on Result, and move 7: Deductions from Research) in the corpus of this study were obligatory, R. Yang, D. Allison (2003) reported move 4 as the only obligatory move in their study. This lack of match may be due to sample size. R. Yang, D. Allison had only eight discussions in their corpus. When the sample size is so small, the findings may not be that reliable. The current study, however, took maximum care to include an acceptable number of discussions in its corpus so that the findings could be reliable.

Studies other than that of R. Yang, D. Allison (2003) also reported move 2 (i.e., Reporting Results) as an obligatory move although they used different labels (e.g., Statement of results, Consolidating results, etc.) for it (cf. Dudley-Evans 1994; Hopkins, Dudley-Evans 1988; Kanoksilapatham 2005; Peng 1987). No study, however, reported move 7 (i.e., Deductions from Research) as an obligatory move. The reason for the obligatory use of move 7 in the corpus of this study may lie in the nature of the theses sampled for this study. Since thesis supervisors in applied linguistics often emphasize the pedagogical dimension of MA theses, it is not surprising that move 7 was considered as an obligatory move by Iranian MA graduates. None of the previous studies had been done in an applied field.

This study found three moves to be obligatory in the 'discussion' subgenre of MA theses in applied linguistics: (a) Move 2 or 'Reporting Results', (b) move 4 or 'Commenting on Results', and (c) move 7 or 'Deductions from Research'. It is, however, important to notice that MA theses in applied linguistics written by Iranian MA graduates include several chapters each with its specific subgenres. For example, chapter five in almost every MA thesis in applied linguistics in Iran includes such sections as 'pedagogical implication' and 'suggestions for further research'. As such, it is not known why such moves should appear in a section that is dedicated to 'discussing' the findings of a research study.

6. CONCLUSION

A pedagogical suggestion, based on this study, would be that academic writing instructors be aware of the standard move structure of 'discussion' subgenre and overtly tell their MA students that such moves are to be included in their MA theses 'discussions'. Course materials may include thesis 'discussion' samples to be analyzed with a move structure focus. Once analysis is done, MA students may be given research articles with the 'discussions' removed, and may be required to write discussions for them while observing the required move structure. This practice will make MA students move-sensitive and will finally foster in them the ability to write good 'discussions'. The same strategy can be used for other subgenres as well.

Moreover, materials developers can also use results from genre studies to develop materials that make MA students move-sensitive. In developing such materials attention should be given to teaching and learning of metatextual vocabulary which is suitable for writing research reports.

REFERENCES

Aidman 2002 = M. Aidman, *Early bilingual writing: Some influences of the mother tongue on written genre learning in the majority language*, in „Australian Review of Applied Linguistics", 25, 2002, no. 1, pp. 1–18.

Anthony 2003 = Laurence Anthony, *AntMover*. Software Retrievable from *http://antpc1.ice.ous.ac.jp/*

Cochran 1977 = W. G. Cochran, *Sampling Techniques*, 3rd ed., New York, John Wiley & Sons, 1977.

Couthard (ed.) 1994 = M. Couthard (ed.), *Advances in written text analysis*, London, Routledge, 1994.

Cresswell 2000 = A. Cresswell, *Self-monitoring in student writing: Developing learner responsibility*, in „ELT Journal", 54, 2000, no. 3, pp. 235–244.

Dudley-Evans 1994 = T. Dudley-Evans, *Genre analysis: An approach to text analysis for ESP*, in M. Couthard (ed.), *Advances in written text analysis*, London, Routledge, 1994, pp. 219–228.

Gall *et alii* 1996 = M. D. Gall, W. R. Borg, J. P. Gall, *Educational research: An introduction*, 6th ed., New York, Longman, 1966.

Howell 1995 = David C. Howell, *Fundamental statistics for the behavioral sciences*, Belmont, California, International Thomson Publishing, 1995.

Hopkins, Dudley-Evans 1988 = A. Hopkins, T. Dudley-Evans, *A genre-based investigation of the discussion sections in articles and dissertations*, in „English for Specific Purposes", 7, 1988, pp. 113–121.

Kanoksilapatham 2005 = B. Kanoksilapatham, *Rhetorical structure of biochemistry research articles*, in „English for Specific Purposes", 24, 2005, pp. 269–292.

Miller 2000 = K. S. Miller, *Academic writers on-line: Investigating pausing in the production of text*, in „Language Teaching Research", 4, 2000, no. 2, pp. 123–148.

Nwogu 1997 = K. N. Nwogu, *The medical research paper: Structure and functions*, in „English for Specific Purposes", 16, 1997, pp. 119–138.

Peng 1987 = J. Peng, *Organisational features in chemical engineering research articles*, in „ELR Journal", 1, 1987, pp. 79–116.

Rasmeenin 2006 = C. Rasmeenin, *A structural move analysis of MA thesis discussion sections in applied linguistics*. Unpublished MA thesis, Mahidol University, 2006.

Sasaki 2000 = M. Sasaki, *Toward an empirical model of EFL writing processes: An exploratory study*, in „Journal of Second Language Writing", 9, 2000, no. 3, pp. 259–291.

Schindler 2000 = K. Schindler, *Gemeinsames Schreiben in der Fremdsprache: Muster, Kreativität und das Glück des Autors*. [General writing in a foreign language: Pattern, creativity, and author's luck.], in „Glottodidactica", 28, 2000, pp. 161–184.

Sereebenjapol 2003 = P. Sereebenjapol, *An analysis of the errors in English which graduate science students make in the discussion section of their thesis.* Unpublished master's thesis, Mahidol University, Thailand, 2003.

Silva, Brice 2004 = T. Silva, B. Brice, *Research in teaching writing*, in „Annual Review of Applied Linguistics", 24, 2004, pp. 70–106.

Swales, Feak 1994 = J. M. Swales, C. B. Feak, *Academic writing for graduate students: Essential tasks and skills*, Ann Arbor, MI, The University of Michigan Press, 1994.

Swales, Feak 2003 = J. M. Swales, C. B. Feak, *English in today's research world: A writing guide*, Ann Arbor, MI, The University of Michigan Press, 2003.

Sze 2002 = C. Sze, *A case study of the revision process of a reluctant ESL student writer*, in „TESL Canada Journal", 19, 2002, no. 2, pp. 21–36.

Thompson 2001 = P. Thompson, *A pedagogically-motivated corpus-based examination of PhD theses: Macrostructure, Citation practices and uses of modal verbs.* Unpublished Ph.D. thesis, School of linguistics and applied language studies, University of Reading, UK, 2001.

Weissberg, Buker 1990 = R. Weissberg, S. Buker, *Writing up research: Experimental research report writing for students of English*, Englewood Cliffs, NJ, Prentice-Hall, 1990.

Wilkinson 1991 = A. M. Wilkinson, *The scientist's handbook for writing papers and dissertations*, Englewood Cliffs, NJ, Prentice-Hall, 1991.

Woodall 2002 = B. R. Woodall, *Language-switching: Using the first language while writing in a second language*, in „Journal of Second Language Writing", 11, 2002, no. 1, pp. 7–28.

Yang, Shi 2003 = L. Yang, L. Shi, *Exploring six MBA students' summary writing by introspection*, in „Journal of English for Academic Purposes", 2, 2003, no. 3, pp. 165–192.

Yang, Allison 2003 = R. Yang, D. Allison, *Research articles in applied linguistics: Moving from results to conclusions*, in „English for Specific Purposes”, 22, 2003, pp. 365–385.

Zimmerman 2000 = R. Zimmerman, *L2 writing: Subprocesses, a model of formulating, and empirical findings*, in „Learning and Instruction”, 10, 2000, no. 1, pp. 73–99.

Abstract

The current study aimed at finding the probable differences between the move structure of Iranian MA graduates' thesis discussion subgenres and those of their non-Iranian counterparts, on the one hand, and those of journal paper authors, on the other. It also aimed at identifying the moves that are considered obligatory, conventional, or optional by Iranian MA graduates. 46 (N = 46) masters thesis 'discussion' sections taken randomly from a pool of 93 discussions written in English by Iranian EFL students comprised the corpus for this study. The *AntMover* software as well as two human coders identified and coded the moves found in the corpus. The resulting move frequencies were compared to those of Rasmeenin's (2006) study as well as R. Yang, D. Allison's (2003) framework using a set of Mann-Whitney *U* tests as well as One-Sample *t*-Tests. Results indicated that there is a significant difference in the move frequency of the discussion sub-genre of MA theses written by Iranian versus non-Iranian EFL students. There was also a significant difference in the move frequency of the discussion sub-genre of MA theses written by Iranian EFL students and the discussion sub-genre of journal papers published in internationally recognized applied-linguistic journals. Obligatory, conventional, and optional moves were also identified. It was concluded that academic writing teachers need to focus on move structures and make their students move-sensitive.

Keywords: *genre, move, rhetoric, writing*.

Iran Encyclopedia Compiling Foundation,
Tehran, Iran
contact@ijls.net